

## UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/700,449	11/09/2000	Tetsuya Yamamoto	SZI 2 0014	3753
7:	590 04/12/2002			
Fay Sharpe Beall Fagan			EXAMINER	
Minnich & McKee Suite 700			VERBITSKY, GAIL KAPLAN	
1100 Superior Avenue Cleveland, OH 44114-2518			ART UNIT	PAPER NUMBER
Cleveland, OII 44114-2516			2859	
		DATE MAILED: 04/12/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No. **09/700,449** 

Applicant(s)

Yamamoto et al.

Examiner

Gail Verbitsky

Art Unit **2859** 

The MAILING DATE of this communication appears	on the cover sheet with the correspondence address
Period for Reply	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET THE MAILING DATE OF THIS COMMUNICATION.	
<ul> <li>Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.</li> </ul>	36 (a). In no event, however, may a reply be timely filed
<ul> <li>If the period for reply specified above is less than thirty (30) days, a reply be considered timely.</li> </ul>	
<ul> <li>If NO period for reply is specified above, the maximum statutory period w communication.</li> </ul>	vill apply and will expire SIX (6) MONTHS from the mailing date of this
<ul> <li>Failure to reply within the set or extended period for reply will, by statute,</li> <li>Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>	cause the application to become ABANDONED (35 U.S.C. § 133). date of this communication, even if timely filed, may reduce any
Status	
1) Responsive to communication(s) filed on	
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This action	
3) Since this application is in condition for allowance exclosed in accordance with the practice under Ex pair	cept for formal matters, prosecution as to the merits is te Quayle35 C.D. 11, 453 O.G. 213.
Disposition of Claims	
4) 🗓 Claim(s) <u>1-19</u>	is/are pending in the applica
4a) Of the above, claim(s)	is/are withdrawn from considera
5)  Claim(s)	is/are allowed.
6) 🗓 Claim(s) <u>1-19</u>	is/are rejected.
7)	is/are objected to.
8)	are subject to restriction and/or election requirem
Application Papers	
9) The specification is objected to by the Examiner.	
10) The drawing(s) filed on is/ar	e objected to by the Examiner.
11) The proposed drawing correction filed on	is: a) approved b) disapproved.
12) The oath or declaration is objected to by the Examine	
Priority under 35 U.S.C. § 119	
13) 🗓 Acknowledgement is made of a claim for foreign prior	ity under 35 U.S.C. § 119(a)-(d).
a)⊠ All b) □ Some* c) □None of:	
1. Certified copies of the priority documents have b	
•	peen received in Application No
<ol> <li>Copies of the certified copies of the priority docu application from the International Bureau (</li> <li>*See the attached detailed Office action for a list of the c</li> </ol>	(PCT Rule 17.2(a)).
14) Acknowledgement is made of a claim for domestic pri	
Attachment(s)	
15) X Notice of References Cited (PTO-892)	18) Interview Summary (PTO-413) Paper No(s).
16) Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) Notice of Informal Patent Application (PTO-152)
17) Information Disclosure Statement(s) (PTO-1449) Paper No(s).	20) Other:

Art Unit: 2859

### **DETAILED ACTION**

## **Priority**

Acknowledgment is made of applicant's claim for foreign priority under 35
 U.S.C. 119(a)-(d).

## Specification

- 2. A) The abstract of the disclosure is objected to because the abstract should be limited to 250 words. Correction is required. See MPEP § 608.01(b).
- B) The specification is objected because no reference to the claim numbers can be made in the specification. Perhaps applicant should replace "claim 2", "claim 3" etc. Throughout the specification with --claims--. Appropriate correction is required.

## Claim Objections

- 3. Claims 5, 8-10 and 13 are objected to because of the following informalities:
- Claim 5: Perhaps applicant should delete "," after "decimal" in line 2,
- Claim 8-10: "the first" and "the second" displays in lines 10 and 12, 10-11 and 10-11
- respectively lack antecedent basis,
- Claim 13: Perhaps applicant should insert --an-- before "operation pattern" in line 5.

Appropriate correction is required.

.

Application/Control Number: 09/700,449 Page 3

Art Unit: 2859

## Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 5. Claims 5-6, 8-10 and 13-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In this case,
- Claims 5- 6: "said display means" in line 2 makes the claim language confusing because it is not clear what particular display means applicant mean, the first or the second?

Claims 8-10: the claim language is confusing because it is not clear how, if the computation means computes 4 digits, the display means displays four and three (total seven ) digits?

Claims 13-19: "said digit shift means switches the display" in line makes the claim language confusing because it is not clear what applicant means. Does applicant means moving a decimal point to right or left? Is this a proper interpretation of the invention? Furthermore, please note, that in the rejection on the merit, Examiner interprets this limitation as moving (shifting) a decimal point to right or left depending on the result of the computation means.

Claim Rejections - 35 USC § 102

Application/Control Number: 09/700,449 Page 4

Art Unit: 2859

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Turner

(U.S. 4090064).

Turner discloses in Fig. 3 a thermometer comprising a computation means 16 computing the temperature measured by temperature measuring circuits (computation means) 12 and 14 in a predetermined computation digits (decimal) numbers, a digit shift means (counter) for changing a display 100. The temperature is measured in Fahrenheit. Turner also discloses a first display for displaying upper (most significant) and a second display for displaying lower (less significant) digits computed by the computation means. Turner further discloses an on-off switch to start measurements in a predetermined pattern. Temperature measurements lasts for a predetermined time. The display is a LED (lighting display). The temperature is being measured in Fahrenheit.

# · Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2859

Page 5

9. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turner in view of Buisson et al. (U.S. 4988995) [hereinafter Buisson].

Turner discloses the device as stated above in paragraph 7.

Turner does not disclose that the displays are switched.

Buisson discloses a device in the field of applicants endeavor comprising a switch (digit shift) for selectively (alternately) switching in between two screens (displays).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Turner so as to make the digit shift work as a switch, as taught by Buisson, in order to selectively switch the display so as only desired range of the information to be displayed.

10. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turner and Buisson as applied to claims 1-4 above, and further in view of Stokes (U.S. 5638308).

Turner and Buisson disclose the device as stated above in paragraph 9.

They do not disclose the limitations of claims 5-6.

Stokes discloses in Fig. 1 a display comprising a plurality of display sections and a decimal point display section wherein a position of the decimal point can be switched (moved) between the first display (FIG. 1 "-2764") and the second display (FIG. 1 "5"). Inherently, if the decimal point moves left (belongs to the first display), it is turned off or does not belong to the second display. According to Stokes, a predetermined display digit number can be two digits

Art Unit: 2859

after decimal point (total three digits on the lower display) and three (more or less) digits before

decimal point depending on the mode of operation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the device disclosed by Turner and Buisson, so as to switch a

position of the decimal point between the first and the second displays in order to provide the

user with a desired accuracy of the data.

11. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turner as

applied to claim 1 above, and further in view of Iida et al. (U.S. 4565456) [hereinafter Iida].

Turner discloses the device as stated above in paragraph 7.

Turner does not disclose the limitations of claims 7-8.

Iida discloses a device in the field of applicant's endeavor wherein temperature is

measured in Centigrade.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the device disclosed by Turner so as to perform the measurements

in Centigrade vs. Fahrenheit, as taught by Iida, because both of these measurement systems are

alternate measurement which will perform to measure the temperature if one system is replaced

with the other.

Stokes discloses a display comprising a plurality of display sections and a decimal point

display section wherein a position of a decimal point can be switched between the first display

Page 6

Art Unit: 2859

(FIG. 1 "-2764") and the second display (FIG. 1 "5"). Inherently, if the decimal point moves left

Page 7

(belongs to the first display), it is turned off or does not belong to the second display. According

to Stokes, the predetermined display digit number can be two digits after decimal point (total

three digits on the lower display) and three (more or less) digits before decimal point depending

on the mode of operation.

For claim 7: The computation means can compute (perform a four digit operation) four digits

from 10 to .01 and display three digits in the first display and three digit in the second display.

For claim 8: The computation means can compute (perform a four digit operation) four digits

from 10 to .01 and display four digits in the first display and one digit in the second display.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the device disclosed by Turner so as to display a predetermined

number of digits on the first and second displays, as taught by Stokes, so as to provide the user

with the desired accuracy of the measurements.

12. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turner as

applied to claim 1 above, and further in view of Stokes.

Turner discloses the device as stated above in paragraph 7.

They do not disclose the limitations of claims 9-10.

Stokes discloses a display comprising a plurality of display sections and a decimal point

display section wherein a position of a decimal point can be switched between the first display

Art Unit: 2859

(FIG. 1 "-2764") and the second display (FIG. 1 "5"). Inherently, if the decimal point moves left

Page 8

(belongs to the first display) is turned off or does not belong to the second display. According to

Stokes, the predetermined display digit number can be two digits after decimal point (total three

digits on the lower display) and three (more or less) digits before decimal point depending on the

mode of operation.

For claim 9: The computation means can compute (perform a four digit operation) four digits

from 10 to .01 and display three digits in the first display and three digit in the second display.

<u>For claim 10</u>: The computation means can compute (perform a four digit operation) four digits

from 10 to .01 and display four digits in the first display and one digit in the second display.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the device disclosed by Turner so as to display a predetermined

number of digits on the first and second displays, as taught by Stokes, so as to provide the user

with the desired accuracy of the measurements.

13. Claim 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Turner and Buisson

as applied to claims 1-4 above, and further in view of DE 41 23 895 A1 [hereinafter DE].

Turner and Buisson disclose the device as stated above in paragraph 9.

They do not disclose the limitations of claim 11.

DE discloses a device in the field of applicant's endeavor wherein two perspective

images being switched are in different modes (transparent vs. opaque).

Application/Control Number: 09/700,449 Page 9

Art Unit: 2859

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Turner and Buisson so as to switch between the opaque and transparent images, as taught by DE, in order to attract the user's attention to the display and demonstrate the difference of states of the two displays.

14. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turner and Buisson as applied to claims 1-4 above, and further in view of Kawamura et al. (U.S. 4690532) [hereinafter Kawamura .

Turner and Buisson disclose the device as stated above in paragraph 9.

They do not disclose the limitations of claim 12.

Kawamura discloses a blinking display element (display) L1 representing variation in the information being obtained (speed).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Turner and Buisson so as to have a blinking display, as taught by Kawamura, in order to attract (alert) the user's attention.

15. Claims 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turner as applied to claim 1 above, and further in view of Stokes and Ikeda et al. (U.S. 4634292) [hereinafter Ikeda].

Turner discloses the device as stated above in paragraph 7.

Page 10

Art Unit: 2859

Turner does not explicitly disclose the limitations of claims 13-19.

Stokes discloses a device wherein a decimal point is shifted to right or left depending on the results of computation of the computation means.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Turner, so as to move a position of the decimal point between the first and the second displays, as taught by Stokes, in order to provide the user with a desired data scale.

Ikeda discloses Fig. 3 a thermometer wherein a predetermined pattern of operation comprises a first time and a second time of operation (switching modes) and the pattern is continuously generated.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Turner and Stokes so that a predetermined operation pattern comprises two signals, as taught by Ikeda, so as to have a predicted control over the displays (screens) and thus, the measuring information.

### Conclusion

- 16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices.
- 17. Any inquiry concerning this communication should be directed to examiner Verbitsky who can be reached at (703) 306-5473 Monday through Friday, 7:30 to 4:00 ET.

Art Unit: 2859

Any inquiry of general nature should be directed to the Group receptionist whose telephone number is (703) 308-0956.

 $\mathsf{GKV}$ 

March 25, 2002

Diego Gutierrez

Supervisory Patent Examiner

TC 2800